

ORIGINAL NEW APPLICATION



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BEFORE THE ARIZONA CORPORATION COMMISSION

Arizona Corporation Commission

DOCKETED

JUN 28 2013

COMMISSIONERS

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AZ CORP COMMISSION  
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IN THE MATTER OF THE APPLICATION  
OF MOHAVE ELECTRIC COOPERATIVE,  
INCORPORATED FOR APPROVAL OF ITS  
2014 RENEWABLE ENERGY STANDARD  
AND TARIFF PLAN, INCLUDING A  
RENEWABLE ENERGY STANDARD  
TARIFF

DOCKET NO. E-01750A-13-0223

APPLICATION

Mohave Electric Cooperative, Incorporated ("MEC"), through its undersigned attorneys, submits this Application requesting approval of its 2014 Renewable Energy Standard and Tariff ("REST") Plan, including its renewable energy standard tariff (the "2014 REST Plan") pursuant to the Commission's Renewable Energy Standard ("RES") rules (and in particular AAC R14-2-1813 and R14-2-1808) and, to the extent not otherwise superseded, the Commission Environmental Portfolio Standard ("EPS") rules (and in particular AAC R14-2-1618). This Application is supported by the following:

1. MEC is a member-owned non-profit cooperative that is certified to provide electricity as a public service corporation in the State of Arizona.
2. MEC's specific REST Plan for 2013 was approved by Commission Decision No. 73633, dated January 31, 2013. MEC seeks no change in its REST Plan for 2014, except

1 for a modest expansion of funding for Community-Based projects.<sup>1</sup>

2 3. By this Application, MEC files its REST Plan for 2014, attached hereto as  
3 Exhibit 1 and incorporated herein by this reference. MEC's 2014 REST Plan maintains the  
4 eight significant features of its 2010 REST Plan.

5 4. The eight major features of MEC's 2014 REST Plan are:

- 6 a. Voluntary Renewable Energy Program ("Green Energy")
- 7 b. Member Self-Directed Renewable Energy Program
- 8 c. SunWatts Residential and Commercial Incentive Program
- 9 d. Clean Renewable Energy Bonds (CREBS)
- 10 e. SunWatts Large-Scale Program (In conjunction with AEPCO)
- 11 f. Analysis of Geothermal Resources Within and Outside MEC's Service  
12 Territory
- 13 g. Distributed Generation Solar Installation Within MEC's Service  
14 Territory
- 15 h. Other Programs – Community-Based Projects

16 5. All communications regarding this Application should be provided to:

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<sup>1</sup> See, Decision Nos. 71407, 71995 and 72092 for other ACC Decisions approving or modifying earlier MEC specific REST Plans. MEC's Net Meter Tariff was separately approved initially by Commission Decision No. 71461, dated January 26, 2010 and revisions are submitted annually.

1 AND

2 Peggy Gillman,  
3 Manager of Public Affairs and Energy Services  
4 Mohave Electric Cooperative, Incorporated  
5 P.O. Box 1045  
6 Bullhead City, Arizona 86430  
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9 pgillman@mohaveelectric.com

10 WHEREFORE, Mohave Electric Cooperative, Incorporated requests the  
11 Commission to enter its Order:

- 12 A. Approving MEC's 2014 REST Plan and Tariffs attached hereto; and  
13 B. Such other and further relief as the Commission deems just and proper  
14 under the circumstances.

15 DATED this 28<sup>th</sup> day of June, 2013.

16 CURTIS, GOODWIN, SULLIVAN,  
17 UDALL & SCHWAB, P.L.C.

18 By: 

19 Michael A. Curtis  
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## **EXHIBIT 1**

### **Mohave Electric Cooperative, Incorporated's 2014 Renewable Energy Standard and Tariff Plan**

# Mohave Electric Cooperative

2014 Renewable Energy Standard and Tariff

(REST Plan)

Submitted by:

Peggy Gillman

Manager of Public Affairs & Energy Services

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Mohave Electric Cooperative, Incorporated

PO Box 1045

Bullhead City, AZ 86430

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# **MOHAVE ELECTRIC COOPERATIVE, INCORPORATED**

## **RENEWABLE ENERGY STANDARD and TARIFF**

### **I. BACKGROUND**

Mohave Electric Cooperative, Incorporated ("MEC") is a rural electric distribution cooperative headquartered in Bullhead City, Arizona. MEC provides electric service to approximately 32,700 members in portions of Mohave, Coconino, and Yavapai counties. MEC owns and operates 112 miles of 69 kV sub transmission lines and 1,407 miles of distribution lines. MEC employs approximately 78 employees and provides service to 26 meters per mile of line in its service territory.

MEC is presently a "partial requirements" wholesale power customer of the Arizona Electric Power Cooperative, Inc. ("AEPSCO") and purchases additional wholesale resources from other market providers. In 2012, MEC delivered 683 gigawatt-hours in retail sales to its members.

Since the inception of the Environmental Portfolio Standard, ("EPS"), and subsequently the Renewable Energy Standard and Tariff, ("REST") through 2009, AEPSCO had filed its annual compliance reports with the Director, Utilities Division, ACC, on behalf of its four Arizona member distribution cooperatives, including MEC. Thereafter, commencing with plan year 2010, MEC, has designed and implemented its own REST Plan, independent from AEPSCO. This application extends MEC's independent REST Plan, with some modifications explained herein, for 2014.

### **II. MEC's REST PLAN**

The MEC REST Plan will continue to include seven components intended to achieve our annual renewable energy goals, which for 2014 is 1.75% of 2013 retail energy sales, adjusted for projected savings achieved through MEC's EE Plan. Those components are:

- Voluntary Renewable Energy Program (unchanged)
- Member Self-Directed Renewable Energy Program (unchanged)
- SunWatts Residential and Commercial Incentive Program (unchanged)
- Clean Renewable Energy Bonds (CREBS—PV for Schools) (unchanged)
- SunWatts Large-Scale Program (In conjunction with AEPSCO) (unchanged)
- Analysis of Geothermal Resources Within and Outside of MEC's Service Territory (unchanged)
- Distributed Generation Renewable Energy Installation Within MEC's Service Territory (unchanged)
- Community-based Projects (modified)

The first four incentive programs are self-selecting; MEC can offer, but cannot compel, customers to undertake renewable projects. The geothermal resources and distributed generation renewable energy installation are programs directed by MEC that all customers will be able to



utilize and share in the benefits. The SunWatts Large-Scale Program, developed in conjunction with AEPCO, provides renewable resources for delivery through AEPCO and provides benefits to MEC members through MEC's membership in AEPCO.

Existing MEC rebates, rebate caps, details, and conditions were effective January 31, 2013. Modifications of the Plan proposed herein will go into effect on January 1, 2014 unless otherwise specified in this Plan or the order of the Commission approving the MEC REST Plan for 2014. Members with existing renewable energy systems are not eligible for additional rebates on the existing systems as a result of changes to the MEC REST Plan.

As discussed below, the modification to the Community-based PV programs is a budget increase of \$150,000 for a total budget of \$250,000 to be used at the community facilities described. The increase to this budget is accomplished by an equal reduction to the budget for Residential and Commercial incentives. MEC's Community-based PV programs are focused on facilities serving government, schools, fire stations, and non-profit organizations. This program benefits a large number of MEC's members by reducing operating costs for government, schools, and community services.

MEC is proposing no change to its 'Renewable Energy Standard Tariff' for 2014; a copy of which is included in the REST Tariffs section of this REST Plan.

#### **Voluntary Renewable Energy Program**

MEC will continue to offer their retail customers a voluntary program whereby participating members of the Cooperative can support the purchase of "green energy." "Green Energy" will be offered to customers for purchase in 50 kWh blocks at a cost of \$2.00 each. "Green Energy" purchases will be reflected as a line item on participating members' monthly invoice. All funds received by MEC under this program will be added to amounts collected from surcharges and used for support of renewable energy projects. Advertising and other promotional materials and activities encourage participation in this program. MEC is not proposing any change to its 'Voluntary Renewable Energy Program Tariff' for 2014; a copy of which is included in the REST Tariffs section of this REST Plan.

#### **Member Self-Directed Renewable Program**

An eligible MEC customer, who pays more than \$25,000 annually in renewable energy surcharge funds, may apply to MEC to receive funds to install distributed renewable energy resources. An eligible customer seeking to participate in this program shall submit to MEC a written application that describes the renewable energy resource that it proposes to install and the projected cost of the project. All renewable energy credits derived from the project shall be applied to satisfy the Cooperative's annual renewable energy requirement. This component is further described in greater detail in the 'Renewable Energy Customer Self-Directed Tariff' MEC is not proposing any change to its 'Renewable Energy Customer Self-Directed Tariff' for 2014; a copy of which is included in the REST Tariffs section of this REST Plan.

## **SunWatts Residential and Commercial Incentive Program**

The SunWatts Incentive Program pays customers rebates to encourage the installation of qualifying member-owned photovoltaic ("PV"), solar water heating and small wind turbine systems. All incentive programs will be rebated on a first come, first served basis until funding is exhausted. Once a customer submits a reservation form, no further reservation form will be accepted from the customer until the pending installation has been fully completed and the rebate provided or the reservation is voluntarily withdrawn.

For residential and small commercial PV and wind systems of all system sizes up to 50 kW, MEC will pay \$0.35 / watt of installed nameplate capacity, up to 40% of the total cost of the system. The dollar cap for PV and wind systems installed at a single location is \$25,000 for both residential and commercial systems. To qualify for incentives, the combined generation capacity at the location is limited to a maximum of 125% of the total connected load at the location and is limited to one installation per service entrance for residential and commercial PV and wind turbine systems.

This incentive program is unchanged from the approved 2013 REST Plan.

All PV and small wind projects larger than 50 kW are not covered by the REST tariff incentives and will be dealt with on a case-by-case basis through negotiated contracts.

For residential solar water heating systems, MEC will continue to provide a rebate of \$0.75 per kWh of energy saved during the system's first year of operation. Solar systems must be OG-300 certified solar systems to be eligible for the SunWatts rebate. A list of OG-300 certified solar systems is available at the Solar Rating and Certification Corporation's website [www.solar-rating.org](http://www.solar-rating.org). MEC will only rebate those systems which replace a traditional electric water heater. In addition, the customer contribution to the cost of the solar water heater project must be a minimum of 15% of the total project cost after accounting for and applying all federal and state incentives. Solar swimming pool heating systems are not eligible for the SunWatts rebate.

In addition to the foregoing programs, MEC will continue to include Biomass, Biogas, Daylighting and Solar Space Cooling. The Daylighting program would rebate \$.20 per kWh saved during the first year. The other programs would offer Production Based Incentives ("PBI") paid for Renewable Energy Credits over a ten-year period. The Biomass/Biogas incentives per kWh will be: \$0.06 for electric generation, \$0.035 for Biomass/Biogas CHP electric, \$0.018 for Biomass/Biogas CHP-Thermal, \$0.015 for Biomass/Biogas thermal and \$0.032 for Biomass/Biogas cooling. The Solar Cooling PBI would be for ten years in the amount of \$0.129 per measured kWh.

## **Clean Renewable Energy Bonds ("CREBs") - PV for Schools**

All eligible schools in MEC's service territory have received PV systems under the approved 2010 and 2011 REST Plans. The Commission has previously authorized MEC to

provide these systems at no cost to the schools by utilizing up to \$1,000,000 of internal MEC funds Repayable with REST funds over ten years at the CREB rate. See Decision No. 72092.

MEC still intends to apply for multi-year funding of its PV for Schools program by application for CREBs or similar Federal and State funding programs as discussed below in order to repay the internal funds advanced for the projects and to otherwise assist in accomplishing renewable energy goals, when and if funding is available for such purposes. At the present time no funding of this type is available; however, MEC will continue to review Federal and State renewable energy funding programs and will apply for funds when they are available to MEC to assist in accomplishing renewable energy goals and reflect the projects associated with those funding sources in future REST Plans. Once Federal or State funds become available for this program for use in 2013 or 2014, MEC would evaluate the CREBs terms and conditions including the ten year interest rate, and deploy CREBs funding as in the best interest of the REST program.

### **SunWatts Large-Scale Program**

The SunWatts Large-Scale Program has two components: A Purchase Power Contract Program and a Generating Program. The Purchase Power Contract Program is administered by AEPCO on behalf of its member cooperatives. MEC will continue to participate with AEPCO and its member cooperative on projects that are determined to be beneficial and help in meeting the REST Plan requirements.

### **Geothermal Resources**

#### **Within The MEC Service Territory**

MEC, in partnership with Navopache Electric Cooperative, Inc., ("NEC"), has retained the firm of Black & Veatch, Consulting Engineers, ("B&V"), to investigate the feasibility of developing geothermal energy resources within each cooperative's service territory. B&V has partnered with GeothermEx, Inc. of Richmond, California to evaluate the literature in the public domain and information provided by NEC to identify and characterize known thermal waters, heat flow and geology.

GeothermEx will use the data collected and evaluated to describe geothermal targets, within or near the two service territories, in terms of depth, host formations and, if possible, order-of-magnitude estimates of generation potential. For the sites identified, preliminary estimates of land status, access, proximity to transmission infrastructure and water availability will be determined. A program of exploration and confirmation drilling, including costs and approximate timelines, has been developed by GeothermEx.

GeothermEx and B&V have delivered their final report to the Cooperatives, which concludes that the potential for an initial 5 MW geothermal generation resource is feasible in both service territories, with the NEC location having the highest probability for success. NEC has initiated a grant application to the DOE to fund exploratory drilling. MEC will continue to monitor the progress of NEC and is prepared to partner with NEC in the development of the

geothermal resource once exploratory drilling indicates that the project will proceed to commercial development. However, MEC has not budgeted any REST funds for this program for 2014.

### **Outside MEC's Service Territory**

MEC continues its Willcox Greenhouse Geothermal Project agreement with Sulphur Springs Valley Electric Cooperative and AEPCO. The project provided 1,116,000 RECs to MEC in 2012.

### **Distributed Generation Solar Installation Within MEC's Service Territory**

MEC continues to explore development of a renewable energy generation project up to 5 MW within the MEC service territory. The Cooperative is considering a developer-based project, as well as exploring MEC's own development of a renewable energy project within its own load bubble.

Funds allocated for this project can be utilized on any qualified renewable project within MEC's Service Territory up to 5 MWs, excluding any renewable for which MEC has another specific program under this REST Plan.

MEC currently has three engineering agreements in place with renewable energy (pv/solar/wind) project developers. One of these pv/solar projects is significantly active. MEC will continue to work with developers to bring a cost effective project into the Cooperative's renewable energy portfolio.

### **Community-Based Programs**

Community-Based Programs - MEC proposes to expand this program to include the following in this program with a total budget of \$250,000:

Habitat for Humanity/Community Services Program – In the past MEC has partnered with Habitat for Humanity to offer alternative energy options to low income housing in MEC's service area. MEC's REST Plan's budget allows for one project per year that would not exceed \$25,000. In years where Habitat for Humanity does not designate an eligible low income housing project under this program by July 1 of the year, MEC will select another community based non-profit organization, to receive the \$25,000 renewable energy project.

PV for Fire Stations Program – MEC will select an eligible Fire Station in the service territory for one PV project per year not to exceed \$50,000, or two Fire Stations for a PV project not to exceed \$25,000 each.

Bullhead City Senior Center – MEC has selected the senior activity center located in Bullhead City, a non-profit facility, to receive a PV system not to exceed \$50,000. MEC's membership includes a large number of seniors many of which are low income. This facility provides resources and activities for those members.

Boys and Girls Club of the Colorado River – MEC has selected the Boys & Girls Club of the Colorado River (BGCCR), a non-profit facility, to receive a PV system not to exceed \$50,000. This facility provides cost-effective youth programs which help working families in MEC's service territory. The PV system will reduce energy costs at a new gymnasium the BGCCR will construct adjacent to their existing facility in 2014.

Colorado River Union High School District – MEC will select one of two high schools located in the service territory to receive a PV systems not to exceed \$50,000. This project will be an addition to an existing PV system approved in MEC's 2010 Plan which was funded by REST and an ARRA grant. These projects help MEC members as taxpayers by helping to lower the operating cost of schools.

In previous REST Plan years, MEC successfully facilitated federal ARRA funding and private donations to enhance REST Plan approved community projects. The Cooperative will continue to pursue government and private donations for future projects under this program.

PV For Schools Program - This program has been described under the CREBs discussion.

Educational Grant Program - One school per year, in MEC's service area, would be offered an educational grant of no more than \$5,000 for the development of renewable energy generation educational curricula for the classroom.

Administrative, Advertising/Promotion, and Research and Development – MEC advertises and promotes its REST programs in a variety of mediums including, but not limited to, bill inserts, monthly newsletter, television, radio and community events. MEC will not use more than 15% of total surcharge funds for administration, research and development and advertising expenses. At the end of each program year, unused funds will be carried over to fund activities and programs in the following year.

MEC maintains information on its customer driven programs on its website at [www.mohaveelectric.com](http://www.mohaveelectric.com). In coordination with the Grand Canyon State Electric Cooperative Association, MEC continues to support and participate in the Arizona Goes Solar website mandated by the Commission, the administration of which is spearheaded by Arizona Public Service Company.

#### **Request for Flexibility to Shift REST Funds between Programs.**

MEC anticipates the incentive program is adequately funded for both 2013 and 2014. No waiting list or backlog of incentive requests currently exists.

All programs will be available until the budget funds for the program are exhausted; however, MEC also seeks ACC authorization to continue to be able to shift approved REST Plan funds between programs, in order to increase budgets for programs in the 2014 Plan where appropriate. MEC proposes that the conditions of shifting funds already included in MEC's 2013 Plan would be continued for 2014.

These conditions include:

- a. No more than 15% of a Program's approved budget may be affected by the shift.
- b. MEC would notify Staff of any plan to shift funds no less than 60 days prior to implementing the shift.
- c. If Staff notifies MEC in writing that it opposed the shift of funds, no shift would occur unless Mohave first secures a Commission order authorizing the shift.
- d. Within 60 days following any funds shift, MEC would submit to Staff a revised budget recognizing the shift of funds.

### **Conclusion and Goals**

MEC has 267 residential and commercial photovoltaic (PV) arrays installed within its service territory. The PV arrays range in size from 2 kW to 46 kW. MEC also has 26 school and Government PV installations, ranging in size from 8 kW to 50 kW; 25 small wind generators, all rated at 2 kW; and 5 solar water heating systems installed within its service territory.

The installations collectively provide a load reduction of 2.915 MW and an annualized delivery of 6384 MWh.

Member-owned systems installed prior to January 2010 were during MEC's participation in the AEPCO REST Plan. Systems installed since 2010 were under MEC's independent REST Plan.

MEC partnered with several government and non-profit organizations on the following community-based projects:

Bullhead City Habitat for Humanity installed a 3.5 kW PV array on the area's first Habitat for Humanity house completed in late 2009 at a cost of \$25,000.

Habitat for Humanity decided not to construct a home in our service area in 2010, so MEC partnered with the Boys and Girls Club to install a renewable energy system at a cost of \$54,000. A private foundation donated \$25,000, with \$4,000 donated by the solar contractor, added to the REST Program funding of \$25,000 to install a 12.375 kW system.

A second Habit for Humanity Home was completed in 2012 and MEC committed \$25,000 in REST funds for a 4.3 kW PV system on the home.

MEC also partnered with Bullhead City to install a 50 kW PV system located at City Hall. The system produces approximately 88,296 kWh annually. MEC advanced the \$394,000 cost of the project which was funded by a combination of federal grant monies and REST funds. Approximately \$53,000 will be repaid to the REST fund by Bullhead City, at no interest, over the 25 year life of the project from energy savings.

Under the "PV for Schools" program for 2009, 2010 and 2011, all eligible schools in MEC's service territory received PV systems through the approved REST Plans. The systems

averaged 16 kW at each school. MEC was also approved to provide these systems at no cost to the schools by utilizing up to \$1,000,000 of internal MEC funds. Details are described under the CREBs discussion. Schools received \$50,000 from the REST Program and an additional \$10,000 of ARRA funds secured by MEC.

Mohave Community College, Bullhead City Campus received \$150,000 for a 40 kW PV system completed in 2011. REST funds provided \$50,000 along with \$25,000 in private foundation funds and a \$75,000 match in ARRA funds, all facilitated by MEC.

In 2012 a 20kW PV system was installed at Bullhead City Fire Station #1 at a cost of \$80,000. REST funds provided \$50,000 and an additional \$30,000 of ARRA funds was secured by MEC.

In 2013 two additional fire stations were selected. A 16 kW system at Golden Shores Fire Department was installed at a cost of \$50,000. Later this year, a 23kW system is planned at a Fort Mojave Mesa Fire Department station, using \$50,000 in REST funds and a \$25,000 private donation.

MEC is continuing to focus on government and community facilities with an emphasis on fire stations throughout the service territory.

MEC continues to cooperate with NEC and consultants to evaluate potential geothermal development in our service territories.

MEC also continues its Willcox Greenhouse Geothermal Project agreement with Sulphur Springs Valley Electric Cooperative and AEPCO.

MEC's goal is to provide renewable energy incentives to its members and to pursue increased opportunities beyond residential systems including geothermal and MEC owned distributed generation projects. These goals must be coordinated with on-going energy efficiency ("EE") efforts.

MEC is also actively pursuing additional large-scale renewable generation projects.

### **III. EXHIBIT A**



# IMPLEMENTATION PLAN

Table 1 - Targeted Resources

Line No.	Targeted Generation Resources:	Ownership <sup>1</sup>	Targeted Completion	2014 total MW	Targeted Energy Production (MWh or Equivalent)				
					2014	2015	2016	2017	2018
1	Solar:								
2									
3									
4									
5	Wind:								
6									
7									
8									
9	Geothermal:								
10									
11									
12	Biomass/Biogas:								
13									
14									
15									
16									
17	Total Targeted Generation								
18									
19	Targeted Distributed Energy Resources:								
20	Residential:	member	1-12/2014	0.769	1,684	1,684	1,684	1,684	1,684
21									
22									
23	Subtotal Residential								
24	Non-Residential:	member	1-12/2014	0.396	867	867	867	867	867
25									
26									
27									
28									
29									
30									
31	Subtotal Non-Residential								
32	Total Targeted DE			1.165	2,551	2,551	2,551	2,551	2,551
33									
34									

## Notes:

<sup>1</sup> All utility-owned and Third Party generation projects are developed through a competitive RFP process, and all DE systems are built independently by Third Party developers and installers.

**IV. EXHIBIT B**

# IMPLEMENTATION PLAN

Table 2 - Targeted RES Resource Costs (in \$Ms)

COMPETITIVELY CONFIDENTIAL<sup>1</sup>

Table 2 – Targeted RES Resource Costs (in \$/m3)			Ownership					Projected RES Cost per Year <sup>1</sup>				
Line No.	Targeted Generation Resources <sup>1</sup> :		2014	2015	2016	2017	2018	Total				
1	Solar:											
2												
3												
4												
5	Wind:											
6												
7												
8												
9	Geothermal:											
10												
11												
12												
13	Biomass/Biogas:											
14												
15												
16												
17	SubTotal Targeted Generation		29,544	29,544	29,544	29,544	29,544	147,720				
18	Targeted and Expected Distributed Energy Resources:											
19	Residential:											
20												
21												
22												
23	Subtotal Residential											
24												
25												
26												
27	Non-Residential:											
28												
29												
30												
31	Subtotal Non-Residential											
32												
33												
34												
35	SubTotal Non-Residential		388,750	388,750	388,750	388,750	388,750	1,943,750				
36												
37	SubTotal Targeted Distributed Energy		658,087	685,087	685,087	685,087	685,087	3,290,435				
38												
39	Total Targeted Energy Costs		687,631	687,631	687,631	687,631	687,631	3,438,155				

## **V. REST TARIFFS**

**MOHAVE ELECTRIC COOPERATIVE, INCORPORATED**  
**Bullhead City, Arizona**  
**RENEWABLE ENERGY STANDARD TARIFF**

**Effective:** January 1, 2014

**Purpose:** To fund renewable energy requirements pursuant to an Arizona Corporation Commission approved renewable energy standard implementation plan.

**Renewable Energy Standard ("RES") Surcharge:**

On all bills for all governmental and agricultural customers with multiple meters, a RES Surcharge mandated by the Commission will be assessed monthly at the lesser of \$0.000942 per kilowatt-hour of retail electricity purchased by the consumer, or:

Governmental and Agricultural Customers	\$15.00 per service;
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Governmental and Agricultural Customers whose metered demand is 3,000 kW or more for three consecutive months:	\$ 49.00 per service.
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On all bills for residential customers and highway customers, except for residential customers who receive incentives under the REST rules on or after January 1, 2013, a RES Surcharge mandated by the Commission will be assessed monthly at the lesser of \$0.0095006 per kilowatt-hour of retail electricity purchased by the customer, or:

Residential Customers:	\$ 3.10 per service
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Highway Customer	\$ 3.10 per service
------------------	---------------------

On all bills for irrigation customers, small commercial customers and large power customers, except for small commercial and large power customers who receive incentives under the REST rules on or after January 1, 2013, a RES Surcharge mandated by the Commission will be assessed monthly at the lesser of \$0.0053714 per kilowatt-hour of retail electricity purchased by the customer, or:

Irrigation Customers:	\$ 49.00 per service
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Small Commercial Customers:	\$ 49.00 per service
-----------------------------	----------------------

Large Power Customers:	\$ 49.00 per service
------------------------	----------------------

Non-Residential Customers whose metered demand is 3,000 kW or more for three consecutive months:	\$ 147.00 per service
--	-----------------------

On all bills for residential, small commercial and large power customers who receive incentives under the REST rules on or after January 1, 2013, a RES Surcharge mandated by the Commission will be assessed monthly at:

Residential Customers:	\$ 3.10 per service
------------------------	---------------------

Small Commercial Customers:	\$ 49.00 per service
-----------------------------	----------------------

Large Power Customers:	\$ 49.00 per service
------------------------	----------------------

In the case of unmetered services, MEC shall, for purposes of billing the RES Surcharge and subject to the caps set forth above, not bill an additional RES surcharge on unmetered service to a member that has a metered service with MEC. For any new unmetered services MEC will use the lesser of (i) the load profile or otherwise estimated kWh required to provide the service in question; or (ii) the service's contract kWh for the purposes of RES Surcharge billing.

The RES Surcharge is in addition to all other rates and charges applicable to service to the customer. The applicable sales tax in Arizona will be added to bills where required. The Cooperative is authorized to pass on to the consumers the applicable proportionate part of any taxes or government impositions, which are or may in the future be assessed on the basis of the gross revenues of the Cooperative.

**MOHAVE ELECTRIC COOPERATIVE, INCORPORATED**  
**Bullhead City, Arizona**

**STANDARD OFFER**  
**VOLUNTARY RENEWABLE ENERGY PROGRAM TARIFF**

**Effective:** January 1, 2014

**VOLUNTARY RENEWABLE ENERGY PROGRAM FOR STANDARD OFFER CUSTOMERS**

Availability

Available as an option to all residential and non-residential standard offer members of the Cooperative to participate in the Cooperative's renewable energy program. Not applicable for resale, breakdown, standby or auxiliary service.

Type of Service

Available to all classes of members, regardless of service entrance size or installed infrastructure located at the member's residence or place of business.

Monthly Rate

\$ 2.00 per month for each block of 50 kWh of electric generation from renewable resources. Members electing this option may purchase one or more blocks. The rate is in addition to the otherwise applicable charges for all kWh consumed under standard offer service provided by the Cooperative.

Term

Members of the Cooperative may enroll at any time, effective at the beginning of the next billing month. Members may terminate their participation at any time by notifying the Cooperative; termination is effective at the end of the current billing month. Terminations made in conjunction with termination of all service from the Cooperative are effective at the time of such termination. Elections to participate or to cancel participation must be made in writing on a form supplied by the Cooperative.

Conditions

All funds collected under this Schedule will be used solely to construct, operate, and maintain renewable energy projects carried out by the Cooperative in Arizona, including solar electric generating projects. Electric energy generated by renewable resources is blended with other energy throughout the Cooperative's distribution system. Energy delivered to members electing this option will consist of such blended energy.

Tax Adjustment

The applicable sales tax in Arizona will be added to bills where required. The Cooperative is authorized to pass on to the consumers the applicable proportionate part of any taxes or government impositions, which are or may in the future be assessed on the basis of the gross revenues of the Cooperative.

Terms of Payment

Billing made under this schedule will be due and payable upon receipt and past due fifteen (15) days from the date the bill is mailed. Service will be subject to disconnect in accordance with the Cooperative's collection policy.

**MOHAVE ELECTRIC COOPERATIVE, INCORPORATED**  
**Bullhead, Arizona**  
**RENEWABLE ENERGY CUSTOMER SELF-DIRECTED TARIFF**

**Effective:** January 1, 2014

**Renewable Energy Standard ("RES") Customer Self-Directed Option**

Application

The RES Customer Self-Directed Option is applicable to single and three phase service for Non-Residential Customers with multiple meters that pay more than \$ 25,000 annually in RES Surcharge funds pursuant to the Renewable Energy Standard Tariff for any number of related accounts or services within the Cooperative's service territory.

Eligible Customer

An Eligible Customer may apply to the Cooperative to receive funds to install Distributed Renewable Energy Resources. An Eligible Customer seeking to participate in this program shall submit to the Cooperative a written application that describes the Renewable Energy Resources that it proposes to install and the projected cost of the project. An Eligible Customer shall provide at least half of the funding necessary to complete the project described in its application.

An Eligible Customer shall enter into a contract with the Cooperative that specifies, at a minimum, the following information: the type of Distributed Generation ("DG") resource, its total estimated cost, kWh output, its completion date, the expected life of the DG system, a schedule of Eligible Customer expenditures and invoices for the DG system, Cooperative payments to an Eligible Customer for the DG system, and the amount of a Security Bond or Letter of Credit necessary to ensure the future operation of the Eligible Customers' DG system, metering equipment, maintenance, insurance, and related costs.

If proposed to be connected to the Cooperative's electrical system, an Eligible Customer's DG resource shall meet all of the Cooperative's DG interconnection requirements and guidelines before being connected to the Cooperative's electrical system.

All Renewable Energy Credits derived from the project, including generation and extra credit multipliers, shall be applied to satisfy the Cooperative's Annual Renewable Energy Requirement.

The funds annually received by an Eligible Customer pursuant to this tariff may not exceed the amount annually paid by the Eligible Customer pursuant to the RES Surcharge Tariff.



## **VI. REST BUDGET**

**Mohave Electric REST Budget****2014**

RES Funding 1,603,448

Tariff Revenues 1,603,448Program Budgets

Residential and Commercial Incentives	408,087
5MW Distributed Generation-Solar	548,884
PV For Schools Loan Repayment	103,189
GO SOLAR Website	1,744
Solar Water Heating	18,000
GeoThermal Resources-Willcox Greenhouse	29,544
Administration & Advertising	244,000
Community Programs: Habit for Humanity	25,000
Community Programs: Fire Department	50,000
Community Programs: Bullhead City Senior Center	50,000
Community Programs: Boys & Girls Club new gym	50,000
Community Programs: High School	75,000
Total Program Expenditures	1,603,448

## **VII. UNIFORM CREDIT PURCHASE PROGRAM**

### **Sample Forms**



• RENEWABLE ENERGY INCENTIVE TARIFF (REST)  
Uniform Credit Purchase Program Application

**RESERVATION FORM**

*This form to be used to request incentive funds from the Renewable Energy Standards Tariff.*

Your request in the MEC REST program assumes that you will owner-occupy the structure and operate your system continuously for a period of ten (10) years after you receive the incentive payment from MEC.

After completing the form, sign and submit to the Energy Management Department to be considered for incentive funds. If funds are not available at the time your reservation form is received you will be placed on a wait list until there are sufficient monies to fund the request. The wait list is based on a first come first serve basis. When the funds become available, the member will be notified to complete the full enrollment packet (Uniform Credit Purchase Program Application and the Interconnect Agreement). The member will have a 60 day period to begin the installation process once the funds have been obligated by Mohave Electric.

PRINT Member Name(s): \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Mohave Electric Account #: \_\_\_\_\_ Meter # \_\_\_\_\_

☐ Residential Account ☐ Commercial Account Service Address: (if different) \_\_\_\_\_

Square footage of residence or building area served by solar meter: \_\_\_\_\_ Main breaker size: \_\_\_\_\_

Description and Size (KW) of Renewable Energy Resource (50KW maximum): \_\_\_\_\_

Projected Cost: \$ \_\_\_\_\_ (ATTACH A COPY OF CONTRACTOR ESTIMATE)

Rebate Amount Requested\*: \$ \_\_\_\_\_ \*

\* MEC will issue a 1099 tax form to you in the amount of the rebate check. An amount on a 1099 does not automatically equate to taxable income, and this is something you should discuss with your tax preparer.

Have you applied for or received other funding for this system? \_\_\_\_\_ YES \_\_\_\_\_ NO

If yes, what is the amount and source of the funding? \_\_\_\_\_

Is this system leased? \_\_\_\_\_ YES \_\_\_\_\_ NO \* If yes, include copy of lease with reservation, and read incentive program terms for leased renewable energy systems on page two of this reservation. \_\_\_\_\_ (member(s) initials)

Are you applying for Net Metering? \_\_\_\_\_ YES \_\_\_\_\_ NO

(If yes, a completed net metering application is also required to be submitted with the Interconnect Agreement)

I warrant that this reservation form was executed by the person whose name appears below and that they are members of the Cooperative.

DATE \_\_\_\_\_ MEMBER SIGNATURE(S) \_\_\_\_\_

**MEC Office Use Only**

1.	Date Received by MEC: _____	By: _____
2.	System/ Load Verified (Pass or % _____)	By: _____
3.	Calculation: _____ watts x \$.35, = Total Pre-Approved Rest Funds: \$ _____	

X \_\_\_\_\_  
Funds Obligated - Authorized Representative of MEC \_\_\_\_\_ Date \_\_\_\_\_

☐ Customer Notified of Approval or Denial (circle) ☐ Cancelled by Customer

X \_\_\_\_\_  
Signed: MEC Energy Management Specialist \_\_\_\_\_ Date \_\_\_\_\_





- **RENEWABLE ENERGY INCENTIVE TARIFF (REST)**

**Uniform Credit Purchase Program Application**

**Incentive Program Terms for Leased Renewable Energy Systems**

Mohave Electric Cooperative (MEC) requires a copy of the lease agreement including all terms and conditions to be submitted along with the Reservation Form.

The following terms must apply and be included in the lease agreement in order for the Reservation to be considered for incentive funds:

1. Environmental attributes such as Renewable Energy Credits (RECs) associated with the electricity produced by the system are assigned and conveyed to MEC for the life of the system.
2. Incentive/rebate check is made payable to Mohave Electric member(s) only.
3. Sale of electricity to a third party is prohibited.
4. Any system that is removed within the first 10 years of operation will require prorated return of the rebate as described in the SunWatts Renewable Energy Incentive Program terms and conditions.

No language in the lease agreement that is contradictory to these terms will be accepted. The lease agreement must be signed by parties, MEC member (lessee) and leasing entity (lessor).

After reading these terms, MEC member(s) must initial on first page of this Reservation Form where indicated.



RENEWABLE ENERGY INCENTIVE PROGRAM—Step 1, Section 1  
Uniform Credit Purchase Program Application

**For residential and commercial systems, the combined generation capacity at the location is limited to a maximum of 125% of the total connected load and is limited to one installation per service entrance.\*\* The maximum amount of an incentive payment will be \$25,000.**

Effective January 2014, as adopted by the Arizona Corporation Commission, the Renewable Energy Incentive Program, MEC will pay its members:

- 1) **Residential and Small Commercial PV and Wind Systems** (an acceptable renewable energy technology\* such as a photovoltaic array or a wind turbine):

System size up to 50kW: MEC will pay \$ 0.35/watt of installed nameplate capacity, up to 40% (not to exceed \$25,000) of the total cost of the system.

- 2) You, a Mohave Electric Cooperative member, submit a signed application and W9 tax form **prior to system installation.**
- 3) You select and have installed a qualifying solar electric system, wind turbine, or other renewable energy technology at your home or business. This home or business must be served by MEC and occupied by an MEC member. Furthermore, your system must meet all qualifications listed in the following "Qualifications" section.
- 4) You must use a licensed electrical or solar contractor to install the system and the installation must meet IEEE standards, the National Electric Code, as well as the MEC Interconnection standards. (See Interconnect Agreement, Step 2). The contractor must also certify the system's installed nameplate capacity in watts. **The incentive amount that you receive is dependent on the installed nameplate capacity in watts.**
- 5) You sign an agreement assigning and conveying rights to the associated environmental attributes, such as Renewable Energy Credits (RECs) to MEC for the life of the system.
- 6) The qualified net metering facility may be eligible for net metering. Please refer to the terms and conditions in the net metering application and the ACC approved Net Metering Service Tariff.
- 7) You, the owner of the renewable energy system, are responsible for payment of normal system repairs and maintenance to the unit, including labor.
- 8) In order to receive the rebate, you must submit the following to MEC:
  - a. Verification from a MEC representative that the installed unit meets the qualifications as set out in the Incentive Program Systems Qualifications page.
  - b. Proof of code inspection of the installation and of the system's installed nameplate capacity in watts certified by a licensed contractor. Failure to pass a code inspection and have a licensed contractor perform the installation and certify the system's output will result in refusal of the rebate.



- c. A System Qualifications-Contractor Certification form initialed by the contractor (Step 3).
  - d. Copies of all building permits and inspection cards.
  - e. Keep a copy of all documents for your records.
- 9) Once the documentation is submitted, please allow 30 days for your rebate to be processed. In the event that demand for funds exceeds a period allocation, MEC may provide reservations to those projects above the allocation depending on the current REST compliance status and availability of funding. In the event that funds collected for use in the Renewable Energy incentive program are not fully subscribed in a program year, those funds will be applied towards the next program year. The funds will be allocated to achieve the required energy outcome between residential and non-residential projects.
- 10) MEC will issue a 1099 tax form to you in the amount of the rebate check. An amount on a 1099 does not automatically equate to taxable income and this is something you should discuss with your tax preparer.
- 11) **After reading the instructions in Step 1, Section 1, member(s) are required to initial: \_\_\_\_\_(member initials)**

**Submit documents to:**

Mohave Electric Cooperative, Inc.  
 Energy Management Department  
 PO Box 1045  
 Bullhead City, AZ 86430  
 Phone: 928-763-1100 (ask for Energy Management Department)  
 FAX: 928-763-7357

\* Those renewable energy technologies which qualify for inclusion in the Arizona Corporation Commission Renewable Energy Standard & Tariff.

\*\* A service entrance is the electric meter location and associated wiring on the member's premises.

The customer's 125% total connected load limit shall be determined:

a. In the absence of demand data (for residential and small business) the highest 12 months (Calendar Year) kWh consumption in the previous three years will be divided by 2190 (to determine the 100% capacity level in kW which will achieve a "net zero" home or business) and multiplied by 125%

b. For customers with a demand history it will be 125% of the highest demand in the most current 12 month period.





RENEWABLE ENERGY INCENTIVE PROGRAM—Step 1, Section 2

**ENROLLMENT FORM**

To be completed by member:

PLEASE PRINT Name(s): \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Mohave Electric Account #: \_\_\_\_\_ Meter # \_\_\_\_\_

Service Address (if different): \_\_\_\_\_

Description of Renewable Energy Resource: \_\_\_\_\_

Projected Cost: \_\_\_\_\_

Rebate Amount Requested: \_\_\_\_\_

Have you applied for or received other funding for this system? \_\_\_\_\_ YES \_\_\_\_\_ NO

If yes, what is the source and amount? \_\_\_\_\_

System Installation *Projected* Completion Date: \_\_\_\_\_

W9 Tax Form included (*please check*): ☐

Are you applying for Net Metering? \_\_\_\_\_ YES \_\_\_\_\_ NO (*If yes, a completed net metering application is also required to be submitted with the Interconnect agreement*).

By signing below, I am assigning and conveying my rights to the associated environmental attributes, such as Renewable Energy Credits (RECs) to MEC for the life of the system. The rebate does NOT cover battery or backup systems.

I understand that as the owner of the equipment, I am fully responsible for the unit's operation and safety. I will pay for normal system maintenance and repairs to the unit, including labor.

**I affirm that I will not activate or operate the system prior to passing the MEC system verification.**

I agree to allow MEC to verify my unit after installation, to ensure it meets requirements set forth in the Renewable Energy Incentive Program Systems Qualifications documentation (see section 4). I agree that MEC is not in any way responsible for the unit, its safety, operation, insurance or repair.





I, \_\_\_\_\_, hereby certify that I have read and reviewed the  
(print name)

Renewable Energy Incentive Program Systems Qualifications. I understand that I am solely responsible for ensuring that these qualifications are met and maintained for the life of my electric generating system and I am responsible for any consequences if they are not met. I understand they are needed for safe operation of my and MEC's electrical system. I also understand that if they are not met, I am not eligible for any rebate from MEC.

**I warrant that this application was executed by the person whose name appears below and that they are members of the Cooperative.**

DATE \_\_\_\_\_ MEMBER SIGNATURE(S) \_\_\_\_\_  
\_\_\_\_\_

*Processing of the rebate is contingent on the accurate certification/testing of the unit. Rebate processing may take up to 30 days. MEC reserves the right to refuse payment of a rebate based on the following reasons, including but not limited to: failure to meet the qualifications set forth in the Renewable Energy Incentive Program Systems Qualifications documentation, incomplete enrollment packets, insufficient system testing or certification, installation and/or testing/certification by an unlicensed electrician.*

~~~~~  
~~~~~  
**For Office Use Only**

**Rebate funds certified by Mohave Electric**

Pre-approved rebate amount: \$

\_\_\_\_\_  
Authorized Representative of Mohave Electric Cooperative, Inc.

\_\_\_\_\_  
Date





## RENEWABLE ENERGY INCENTIVE PROGRAM—Step 1, Section 3

### *OPERATION OF RENEWABLE ENERGY SYSTEM, SALE OF PROPERTY AND MEMBER'S REFUND OBLIGATION*

Your participation in the MEC Renewable Energy Incentive Program assumes that you will owner-occupy the structure and operate your system continuously for a period of ten (10) years after you receive the incentive payment from MEC. If you fail to do so, then you will be considered to be out of compliance with the program requirements and MEC will be entitled to reimbursement of the incentive payment.

You are required to notify MEC within five (5) business days after your system is either removed from your property or is no longer operational. MEC will consider this notification as the removal date. If you fail to maintain and operate your system for at least one year after the date you receive the incentive payment, liquidated damages may apply. In such event, you will be required to reimburse us the total amount of the incentive payment in certified funds no later than five (5) business days after your receipt of our request that you refund the incentive payment to MEC. If the removal date occurs after the first year but before the end of the tenth year, we reserve the right to request a pro-rated refund of the incentive payment. If your removal date occurs in Year 2, you would refund to MEC 80% of the incentive payment, Year 3, 70%, in Year 4, 60% and so on.

MEC may waive the foregoing reimbursement obligation or any other instance of your noncompliance if it is determined that the renewable energy system is not operational due to equipment malfunction or other disrepair that is not attributable to you, and, you are actively and reasonably making diligent, good faith efforts to repair the renewable energy system and return it to operation.

When MEC receives your reimbursement payment this incentive agreement will be deemed terminated and neither MEC nor you will have any further obligation to each other, but resolution of our respective obligations and rights will continue to be determined by this agreement until our relationship with each other is finally and completely resolved.

There are certain important conditions to consider if you sell your property where the renewable energy system is installed.

- a. You are required to notify MEC in writing promptly in the event that you intend to sell your property.
- b. If you sell your property within one (1) year after we pay you the incentive payment and your buyer does not continue to operate and maintain the renewable energy system you will be required to reimburse MEC the total amount of the incentive payment.
- c. If you sell your property more than one (1) year after you receive the incentive payment, you must make arrangements to have your buyer agree to these terms and conditions whereby your buyer will continue to operate the renewable energy system.

After reading the instructions in Step 1, Section 3, member(s) are required to initial: \_\_\_\_\_ (member initials)



## RENEWABLE ENERGY INCENTIVE PROGRAM—Step 1, Section 4

### SYSTEM QUALIFICATIONS

*All member-owned renewable energy system components must meet the following system and installation requirements to be connected to the MEC electric distribution system. Your licensed contractor will be required to initial compliance with the following items upon completion of system installation. (Refer to System Qualifications Contractor Certification—Step 3)*

1. The system components must be certified as meeting the requirements of IEEE-929 – Recommended Practice for Utility Interface of Photovoltaic Systems.
2. The system components must be certified as meeting the requirements of UL – 1741 – Power Conditioning Units for use in Residential Photovoltaic Power and be covered by a non-prorated manufacturer's warranty of at least two years.
3. The system design and installation must meet all requirements of the latest edition of the National Electric Code (NEC), including Article 690 and all grounding, conductor, raceway, over-current protection, disconnect and labeling requirements.
4. The system and installation must meet the requirements of all federal, state and local building codes and have been successfully inspected by the building official having jurisdiction. To do so, the installation must be completed in accordance with the requirements of the latest edition of the NEC in effect in the jurisdiction where the installation is being completed, including, without limitation, Sections 200-6, 210-6, 23070, 240-3, 250-26, 250-50, 250-122, all of Article 690 pertaining to photovoltaic systems, thereof, all as amended and superseded.
5. A wind turbine system must be certified as meeting the requirements of UL – 1741 – Standard for Safety for Inverters, Converters, Controllers, and Interconnection System Equipment for Use With Distributed Energy Resources, 1st Edition; IEEE 1547 – 2003; CAN/CSA-C22.2 No 107.1-01, 3rd Edition.
6. An AC disconnect means shall be provided on all ungrounded AC conductors and shall consist of a lockable gang-operated disconnect clearly indicating open or closed. The switch shall be visually inspected to determine that the switch is open. The switch shall be clearly labeled stating "Renewable Energy System AC Disconnect."
7. All system installations must be completed in a professional, workman-like and safe manner.
8. All system installations must be completed by a licensed electrical contractor. NO EXCEPTIONS.
9. It is recommended that the member have a separate member-owned meter to measure the output of the member-owned renewable energy system.
10. A lock will be installed to prevent operating the system prior to the MEC verification. ***The system is not to be activated or operated until after it passes the MEC verification.***





## NET METERING SERVICE TARIFF AND APPLICATION

**Mohave's Net Metering Service Tariff is approved by the Arizona Corporation Commission and establishes the terms and conditions of Net Metering service.**

Net Metering service is available, but not required, for all end-use retail customers of the Cooperative with metered kWh usage with a qualifying Net Metering Facility.

Under Net Metering the electric energy generated by or on behalf of the member from a qualifying Net Metering Facility and delivered to the Cooperative's distribution facilities may be used to offset electric energy provided by the Cooperative during the applicable billing period as specified in this Tariff. Service under this Tariff is subject to: installation of a bidirectional meter (a new meter may or may not be needed); availability of enhanced metering and billing system upgrades; the rated capacity of the customer's Net Metering Facility not exceeding the Cooperative's service capacity; and the customer complying with all of the Cooperative's interconnection standards. Under this agreement the customer agrees to assign and convey all environmental attributes, including RECs, to MEC for the life of the system.

The customer shall also be required to sign and complete a Net Metering Application and Interconnect Agreement prior to being provided Net Metering Service. A customer that installs a Net Metering Facility is not required to take service under this Tariff, but still must comply with the Cooperative's interconnection standards.

Net Metering commences **after** the completion of all applicable metering, billing, and administrative terms and conditions for Net Metering service. Net Metering is effective on future usage only and is not retroactive.

### **Net Metering Facility**

Net Metering Facility means a facility for the production of electricity that:

- Is operated by or on behalf of the customer and is located on the customer's premises;
- Is intended to provide part or all of the customer's requirements for electricity;
- Uses Renewable Resources, a Fuel Cell or CHP to generate electricity;
- Has a generating capacity less than or equal to 125% of the customer's total connected load\*, or in the absence of customer load data, capacity less than or equal to the customer's electric service drop capacity; and
- Is interconnected with and can operate in parallel with the Cooperative's existing distribution system.

\*The customer's 125% total connected load limit shall be determined:

- c. In the absence of demand data (for residential and small business) the highest 12 months (Calendar Year) kWh consumption in the previous three years will be divided by 2190 (to determine the 100% capacity level in kW which will achieve a "net zero" home or business) and multiplied by 125%
- d. For customers with a demand history it will be 125% of the highest demand in the most current 12 month period.

### **Metering**

Customers served under this Tariff will require a bidirectional meter that will register and accumulate the net electrical requirements of the customer and shall have other capabilities similar to meter that is being replaced or that would be installed for the service (e.g., Advanced Metering Infrastructure (AMI) capabilities). The Cooperative will install such a meter at the customer's Net Metering Facility if proper metering is not already present. The incremental metering costs for bidirectional metering and the facility meter will be incurred by the Cooperative.

### Billing

During the billing period for:

- Customer Purchases in excess of Customer Supply
  - Cooperative shall bill the customer for the net kWh supplied by the Cooperative in accordance with the Cooperative's applicable Standard Retail Rate Schedule.
- Customer Supply in excess of Customer Purchases (Excess Generation)
  - Cooperative shall credit the customer the Excess Generation kWh in subsequent billing periods to reduce the kWh supplied (not kW or kVa demand or customer charges).
- Basic Service Charges and Demand charges (either metered or contract) and all other elements of the Cooperative's applicable Standard Retail Rate Schedule will continue to apply in full, except that the monthly "Customer Charge" for the applicable Optional Time-of-Use Rate will be applied whether or not the customer has elected the Time-of-Use rate. **Residential Customer Charge will be \$21.50 per month. Small Commercial Customer Charge will be \$41.03 per month.**
- For the last billing period of each Calendar Year or for the last billing period at the time the customer discontinues taking service under this rate schedule:

The Cooperative shall issue a billing credit to the customer for any remaining Excess Generation balance. In the event the customer's electric service is terminated, after applying a billing credit for any Excess Generation up to the amount the customers owe the Cooperative, the Cooperative shall issue a check for the remaining value of the Excess Generation balance. The payment or credit will be determined at the Cooperative's Annual Average Avoided Cost, which shall be updated annually and are as specified below:

2011 Annual Purchase Rate (cents/kWh): \$0.0338\*

*\*This amount in effect as of December 1, 2012. The Arizona Corporation Commission (ACC) re-evaluates avoided cost amounts annually and the amount is subject to change based on that review.*

- An Administrative Charge may be charged by the Cooperative to collect new or additional costs the Cooperative incurs associated with the provision of Net Metering service (such as additional data communication access and billing costs) upon filing with and approval of such charge by the Arizona Corporation Commission pursuant to ACC R14-2-2305.

**After completing the application, member(s) must sign and submit to the Energy Management Department. (Interconnect Agreement is also required)**

PRINT Member Name(s): \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Mohave Electric Account #: \_\_\_\_\_

Service Location: \_\_\_\_\_

Description of Renewable Energy Resource: \_\_\_\_\_

**I (we) certify that I (we) received and read a copy of Mohave's Net Metering Tariff, understand and agree to comply with the terms and conditions of the tariff, and that this agreement will not be terminated earlier than one year after its effective date.**

DATE \_\_\_\_\_ MEMBER SIGNATURE(S) \_\_\_\_\_

\_\_\_\_\_

~~~~~  
For Office Use Only

Date Application Received: \_\_\_\_\_ By: \_\_\_\_\_  
(Authorized Representative of Mohave Electric Cooperative)





## RENEWABLE ENERGY INCENTIVE PROGRAM—Step 3

### SYSTEM QUALIFICATIONS - CONTRACTOR CERTIFICATION

**\*To be completed after project has passed city or county inspections\***

**CUSTOMER/PROJECT NAME:** \_\_\_\_\_

**MEC Energy Management Specialist will notify member when all systems qualifications have been met and the system may begin operation.**

All member-owned renewable energy system components must meet the following system and installation requirements to be connected to the MEC electric distribution system. The licensed contractor installing the system is required to initial compliance with the following items upon completion of system installation:

1. \_\_\_\_\_ The system components must be certified as meeting the requirements of IEEE-929 – Recommended Practice for Utility Interface of Photovoltaic Systems.
2. \_\_\_\_\_ The system components must be certified as meeting the requirements of UL – 1741 – Power Conditioning Units for use in Residential Photovoltaic Power and be covered by a non-prorated manufacturer's warranty of at least two years.
3. \_\_\_\_\_ The system design and installation must meet all requirements of the latest edition of the National Electric Code (NEC), including Article 690 and all grounding, conductor, raceway, over-current protection, disconnect and labeling requirements.
4. \_\_\_\_\_ The system and installation must meet the requirements of all federal, state and local building codes and have been successfully inspected by the building official having jurisdiction. To do so, the installation must be completed in accordance with the requirements of the latest edition of the NEC in effect in the jurisdiction where the installation is being completed, including, without limitation, Sections 200-6, 210-6, 230.70, 240-3, 250-26, 250-50, 250-122, all of Article 690 pertaining to photovoltaic systems, thereof, all as amended and superseded.



5. \_\_\_\_\_ A wind turbine system must be certified as meeting the requirements of UL – 1741 – Standard for Safety for Inverters, Converters, Controllers, and Interconnection System Equipment for Use With Distributed Energy Resources, 1st Edition; IEEE 1547 – 2003; CAN/CSA-C22.2 No 107.1-01, 3rd Edition.

6. \_\_\_\_\_ An AC disconnect means shall be provided on all ungrounded AC conductors and shall consist of a lockable gang-operated disconnect clearly indicating open or closed. The switch shall be visually inspected to determine that the switch is open. The switch shall be clearly labeled stating "Renewable Energy System AC Disconnect."

7. \_\_\_\_\_ All system installations must be completed in a professional, workman-like and safe manner.

8. \_\_\_\_\_ All system installations must be completed by a licensed electrical contractor. NO EXCEPTIONS.

9. \_\_\_\_\_ Installer of this system certifies that the system will not operate, and will install a lock to prevent operating, in parallel to the MEC distribution system until the system passes the MEC verification.

CERTIFIED BY:

\_\_\_\_\_  
Electrical Contractor Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
ROC Number

~~~~~  
**FORWARD CONTRACTOR CERTIFICATION TO:**

Mohave Electric Cooperative, Inc.  
Energy Management Department  
PO Box 1045  
Bullhead City, Arizona 86430  
Phone: 928-763-1100 FAX: 928-763-7357

~~~~~  
**For Office Use Only**  
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Copy to Engineering Department File:

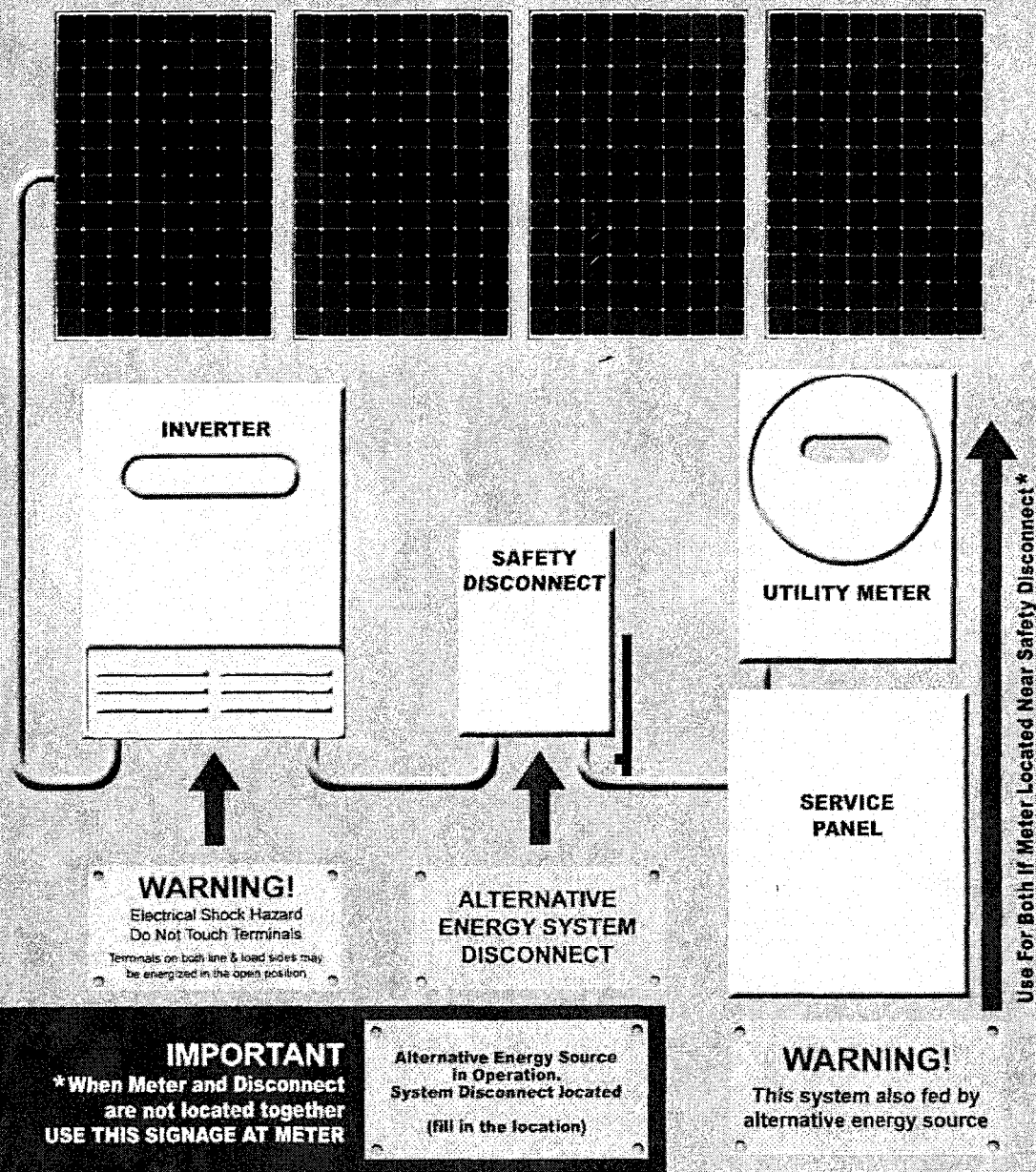
\_\_\_\_\_  
Authorized Representative of Mohave Electric Cooperative, Inc.

\_\_\_\_\_  
Date



# MOHAVE ELECTRIC COOPERATIVE

## Alternative Energy System Labeling Requirements



Signs must be made of hard plastic with engraved letters (no stickers) and attached with rivets or screws. Installer may apply signage during MEC system verification, when meter door is open.





## RENEWABLE ENERGY INCENTIVE PROGRAM—Step 4

### *SUBMITTAL OF FINAL REBATE APPLICATION FORMS*

After the Solar or Wind Generation system has been installed and passed all City and/or County building inspections, the Mohave Electric Cooperative member submits the following paperwork to finalize the rebate application procedure:

- ❖ A copy of the final bill or invoice from the Solar/Wind Contractor.
- ❖ Copy of the Building Permit.
- ❖ Copy of the final Building Inspection.
- ❖ The System Qualifications-Contractor Certification form with code requirements initialed by a licensed electrician (step 3).

At this point, all three steps are complete and now the system must pass system verification by Mohave Electric Cooperative's Energy Management Specialist and Operations Supervisor for compliance with MEC Interconnection Agreement.

**It is also important to remind you that you can not activate or operate your system before it has passed the MEC verification.**

After the system verifications are passed, the rebate will be processed and issued to the Member.



## VIII. INTERCONNECTION APPLICATION



## RENEWABLE ENERGY INCENTIVE PROGRAM—Step 2

### *INTERCONNECT AGREEMENT*

Application for Operation of Member-Owned Small Generation Attached to MEC  
**\*To be approved by MEC prior to installation of the renewable energy system\***

This application should be completed as soon as possible and returned to MEC's Energy Management representative in order to begin processing the request.

**INFORMATION:** This application is used by MEC to determine the required equipment configuration for the Customer interface. Every effort should be made to supply as much information as possible. This application is intended to apply to member-owned systems attached to MEC distribution system on the member side of the meter.

#### **Responsibilities of Member for Installation, Operation and Maintenance of Net Metering Facilities**

- 1) The Member will, at its own cost and expense, install, operate, maintain, repair, and inspect, and shall be fully responsible for, its facilities.
- 2) The Member shall conduct operations of its facilities in accordance with industry standards. Maintenance of facilities by the Member shall be performed in accordance with the applicable manufacturers' recommended maintenance schedule.
- 3) The Member agrees to cause its facilities to be constructed in accordance with the Rules and specifications equal to or better than those provided by the National Electrical Safety Code and the National Electrical Code, both codes approved by the American National Standards Institute, in effect at the time of construction.
- 4) The Member covenants and agrees to cause the design, installation, maintenance, and operation of, its facilities so as to reasonably minimize the likelihood of a malfunction or other disturbance, damaging or otherwise affecting or impairing the Cooperative's system. The electrical output of the Member's facilities shall not cause disturbance on or damage to the Cooperative's electrical system.
- 5) The Member shall exercise reasonable care to assure that the electrical characteristics of its facilities will not result in significant impairment of service to other customers or in interference with operation of computer, telephone, television, or other communications systems or facilities.
- 6) The Member shall comply with all applicable laws, regulations, zoning codes, building codes, safety rules and environmental restrictions applicable to the design, installation, operation and maintenance of its facilities.

- 7) The Member will notify the Cooperative of any emergency or hazardous condition or occurrence with the Member's facilities which could affect safe operation of the Cooperative's system.
- 8) By signing this agreement, the member agrees to assign and convey rights to the associated environmental attributes, such as Renewable Energy Credits (RECs) to MEC for the life of the system.

### **Responsibilities of Cooperative**

The Cooperative shall perform an inspection of the interconnected facilities prior to energization to verify that the facility meets the interconnection requirements of the Sun Watts program.

The Cooperative will perform subsequent periodic inspections of the interconnected facilities to verify the facility continues to meet those interconnection requirements.

The Cooperative will notify the Member if there is evidence that the Member's facilities operation causes disruption or deterioration of service to Cooperative's system.

### **MEMBER/APPLICANT INFORMATION**

Member Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
Street/PO Box City State Zip Code

Installation Address: \_\_\_\_\_  
Street Address City State Zip Code

Mohave Electric Account# \_\_\_\_\_ Meter # \_\_\_\_\_

### **PROJECT DESIGN/ENGINEERING (ARCHITECT) (as applicable)**

Company Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Representative: \_\_\_\_\_

### **ELECTRICAL CONTRACTOR (as applicable)**

Company Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Representative: \_\_\_\_\_

ROC# \_\_\_\_\_



### TYPE OF GENERATOR (as applicable)

Photovoltaic

Wind

Other

### ESTIMATED LOAD AND GENERATOR RATING

The following information will be used to help properly design the interconnection between MEC's facilities and the Members facilities. This information is not intended as a commitment or contract for billing purposes.

Total Site Load \_\_\_\_\_ (kW)

Residential \_\_\_\_\_ Commercial \_\_\_\_\_ Industrial \_\_\_\_\_

Generator Nameplate Rating \_\_\_\_\_ (kW)

Annual Estimated Generation \_\_\_\_\_ (kWh)

### DESCRIPTION OF PROPOSED INSTALLATION AND OPERATION

Give a general description of the proposed installation, including a detailed description of its planned location, number of panels or turbines, model numbers, and nameplate output.



**INVERTER DATA (if applicable)**

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_

Rated Power Factor (%): \_\_\_\_\_ Rated Voltage (Volts): \_\_\_\_\_

Rated Amperes: \_\_\_\_\_

Inverter Type (ferroresonant, step, pulse-width modulation, etc): \_\_\_\_\_

Type commutation: forced line Harmonic Distortion: Maximum Single Harmonic (%) \_\_\_\_\_

**Note:** Attach all available calculations, test reports, and oscillographic prints showing inverter output voltage and current waveforms.

**MEMBER AGREEMENT AND SIGNATURE:**

I hereby certify that, to the best of my knowledge, the information provided in this Interconnection Agreement is true. I agree to provide any further information required during the Interconnection Application Process and to install and operate the interconnection equipment according to the Terms and Conditions outlined herein.

**I warrant that this Interconnect Agreement was executed by the person whose name appears below and that they are members of the Cooperative.**

DATE \_\_\_\_\_ MEMBER SIGNATURE(S) \_\_\_\_\_

**MEMBER SUBMITS DOCUMENT TO:**

Mohave Electric Cooperative, Inc.  
Engineering Department  
PO Box 1045  
Bullhead City, Arizona 86430  
Phone: 928-763-4115 FAX: 928-763-6094

*For Office Use Only*  
**Engineering Department Verification**

\_\_\_\_\_  
Authorized Representative of Mohave Electric Cooperative, Inc. Date

*(Forward to Energy Management following signature/verification)*

